

INTERNATIONAL PRELIMINARY EXAMINATION REPORT


(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 702423PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US 03/30195	International filing date (day/month/year) 22.09.2003	Priority date (day/month/year) 30.09.2002
International Patent Classification (IPC) or both national classification and IPC B62D21/00		
Applicant MAGNA INTERNATIONAL INC. ET AL		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets, including this cover sheet.
 - ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 4 sheets.

3. This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 16.04.2004	Date of completion of this report 06.12.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Westland, P Telephone No. +31 70 340-3722



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International application No. PCT/US 03/0195

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-8 as originally filed

Claims, Numbers

1-26 received on 17.09.2004 with letter of 15.09.2004

Drawings, Sheets

1/4-4/4 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

see separate sheet

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-26
	No: Claims	
Inventive step (IS)	Yes: Claims	1-26
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-26
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item I

Basis of the report

Claims 25 and 26 of the amended claims received by telefax on 15.09.2004 were obscured. Hence the confirmation copy, received 17.09.2004, was used for this report.

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

- D1: DE 198 22 731 A (BAYERISCHE MOTOREN WERKE AG) 25 November 1999 (1999-11-25)
- D2: US-A-5 915 727 (BONNVILLE KENNETH J) 29 June 1999 (1999-06-29)
- D3: DE 100 23 506 A (WAGON AUTOMOTIVE GMBH) 25 October 2001 (2001-10-25)

1 Claims 1-10,21,22

- 1.1 The document D1 is regarded as being the closest prior art to the subject-matter of claim 1 and shows (the references in parentheses applying to this document):

a cross member (of a sub-frame) for a motor vehicle, comprising:
an elongated, center structure (front cross member) having a first end (17), a mid portion (2), and a second end (17, same references left and right), said center structure (2) being formed as a non-cast structure (extruded, or tube with a longitudinal welded seam; see col.2, lines 40-66);
a first casting (4, see claim 2) rigidly connected to said first end (17) of said center structure (2);
and a second casting (4) rigidly connected to said second end (17) of said center structure, each of said first and second castings (14) being configured and arranged to be attached to a respective motor vehicle element (by means of seating elements, 6, to the vehicle body).

The subject-matter of claim 1 differs from this known cross member in that:

each of said first and second ends of said center structure includes a flange extending from said center structure and constructed and arranged to rigidify and

strengthen said center structure while providing a surface that can be placed against a side surface of a respective casting of said first and second castings for attachment with said respective casting of said first and second castings.

The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

- 1.2 The problem to be solved by the present invention may be regarded as providing attachment surfaces on the center structure for the castings which also serve to rigidify and strengthen the center structure.

The solution to this problem proposed in claim 1 of the present application is not disclosed in or rendered obvious by the available prior art, e.g. by D1-D3. Document D1 discloses flanges of some sort, but ones which do not extend from the center structure, thereby neither rigidifying nor strengthening the structure in providing attachment surfaces. Therefore the subject-matter of claim 1 is considered as involving an inventive step (Article 33(3) PCT).

- 1.3 Claims 2-10,21,22 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

2 Claims 10-13,23,24

- 2.1 Claim 10 is directed towards a vehicle frame which comprises, amongst other things, a cross member according to claim 1 and as such also meets the requirements of the PCT with respect to novelty and inventive step for the reasons given in paragraph 1.
- 2.2 Claims 11-13,23,24 are dependent on claim 10 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

3 Claims 14-19,25

- 3.1 Claim 14 is directed towards a method of forming the cross member of claim 1 and as such also meets the requirements of the PCT with respect to novelty and inventive step for the reasons given in paragraph 1.

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3.2 Claims 15-19,25 are dependent on claim 14 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

4 Claims 20,26

4.1 Claim 20 is directed towards a method of forming of a motor vehicle frame which comprises the cross member of claim 1 and as such also meets the requirements of the PCT with respect to novelty and inventive step for the reasons given in paragraph 1.

4.2 Claim 26 is dependent on claim 20 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

5 Use in the automobile industry as structural components.